

September 8, 1944

HOW PUERTO RICANS ARE BEING TAUGHT TO USE NATIVE FOODS  
(A Nutrition Case History 1/)

by  
Nell Enloe Smith 2/

The Background

The social influences that have left the strongest mark upon the people of Puerto Rico are those of the Spanish Grandees who were the chief owners of the island four centuries ago. As top ranking citizens of the country, their customs and social attitudes have influenced present day Puerto Ricans.

This island, a territory of the United States since 1898, is far down in the Caribbean. It was populated by native Indians when Columbus discovered it. The Spaniards seeking gold came soon afterwards. Because of Puerto Rico's tropical, frost free climate, people from Africa were brought to work in its fertile fields. Today some families, after 400 years, are of pure racial stock and some have intermarried with the other races, but all have adjusted to living without friction in the same communities.

Rico

The extremely high birth rate in Puerto Rico has made it one of the most densely populated areas on the face of the globe. The children reach school age faster than the Government can build schools for their use. This does not greatly disturb Puerto Ricans of the poorer classes. For the four centuries when Puerto Rico was under Spanish rule, schools were not common. Only members of the wealthy classes were schooled and even the girls of wealthy families were given little formal schooling.

The Problem

A climate which supports a year-round growth of pineapples, breadfruit, mameys, mangoes, jobos, coconuts, guavas and other exotic fruits, as well as avocados, grapefruit, oranges, melons, bananas, tomatoes, radishes, cucumbers, string beans, peppers, yams, and other fruits and vegetables, suggests a people whose tables would be constantly graced with different foods. But only a few of the Puerto Ricans use the fresh vegetables and fruits. Instead they serve rice, lard, beans, and codfish every day in the year that they can obtain and afford them. The well-to-do families will add meat, poultry,

---

1/ One of a series of case histories prepared for use in the Conference on the Contribution of Extension Methods and Techniques Toward the Rehabilitation of War-Torn Countries, held in Washington, D.C., September 19 to 22, 1944. Extension Service and Office of Foreign Agricultural Relations, Cooperating.

2/ Nell Enloe Smith, Nutrition Programs Branch, Office of Distribution, WFA. In preparing this case history the author drew primarily from unpublished reports of Dr. Lydia Roberts, who directed the Nutrition Workshop in Puerto Rico in the summer of 1943, and from the unpublished reports of the workshop participants. Published reports of Dr. Roberts and other sources of information appear in the bibliography.

vegetables and fruits, but the codfish, beans, rice and lard for seasoning the rice, are almost always present.

The town of Yabucoa is typical of all of Puerto Rico, in that it has a cash-crop economy. The income of most of the families in the Yabucoa area, both rural and urban, comes from work at the sugar fields or centrals. Sugar-cane is the main cash crop, and the best and most productive land is devoted to it.

Laborers are chiefly part-time employees. Only a small percentage of the population in the Yabucoa area own land. Those who farm have small places on the hillsides, ranging from an acre to ten acres. The land is very hilly, tillage methods are poor, and soil conservation methods are unknown. Cutting the trees for lumber or charcoal for cooking has left the land bare. These are factors which have left the soils of these farms badly depleted.

Earnings of the poorer classes go chiefly for clothes. This love of display and the social attitudes which have been developed toward manual work has had an influence upon the food habits of the islanders. The women do not exchange recipes as do the women of the mainland. If the family belongs to the top upper class, they have a cook who does most of the purchasing and the kitchen work. Only rarely does the mistress go to market. Rogler says that, "Among the poor the menu is so simple and so standardized that the woman concerns herself very little with it." Lack of refrigeration and a tropic climate have forced all classes to buy their food in small amounts.

Any manual work is considered a mark of low estate. Gardening among the upper classes is not fashionable as it is in the United States.

Puerto Rico, an island, would be expected to have a sizeable fishing industry. But it does not. Commercial refrigeration as well as commercial distribution, as we know it, is decidedly limited. Freshly caught fish lies a half day in a boat under the tropic sun, then is carried in a vender's head basket in the sun before it reaches the home cook-pots; so the people say they do not like fresh fish because it has a poor flavor. Since there is little grain for feeding meat animals, and commercial fishing is not feasible, codfish, possibly first traded by New England sea captains for rum, has come to be a liked staple food.

Protein is particularly lacking in the diet of the masses. During the off-season in the sugarcane industry, the poorer families of the lowest income level in the Yabucoa area may have the following diet: black coffee with a little sugar for breakfast. While at work they take a mid-morning meal around 9 o'clock which consists of more coffee, usually without milk, a piece of bread and some starchy vegetable. At lunch time they have large amounts of boiled starchy vegetables and black coffee; they seldom have codfish. For dinner they take leftovers from the lunch meal. In the towns they may go to bed without dinner if they have no leftovers. Decided food preferences and fixed folk taboos against many native fruits and vegetables also limit the menus.

With the advent of war, enemy submarines menaced the shipping lanes of the Atlantic. This, to Puerto Ricans, meant a crisis in their food situation.

No longer could they depend upon regular shipments of their favorite cod-fish, lard, and beans. One of the steps taken to encourage the wider use of native foods and at the same time improve the food value of the diets on the island, was the organization of a Nutrition Workshop at the University of Puerto Rico. Dr. Lydia J. Roberts of the University of Chicago, an outstanding scientist in the field of nutrition, directed the workshop which was sponsored as a demonstration project by the Insular Nutrition Committee, in cooperation with the Nutrition Programs Branch, Office of Distribution.

Since food from the mainland was drastically limited because of the war, members of the Workshop group turned their attention to making a practical survey of what the island offered both in assets and liabilities. Against better nutrition for Puerto Ricans the Workshop participants found they were faced with a number of such difficult factors as: (1) low incomes; (2) poor food habits; (3) food taboos and food fallacies; (4) "caste" attitudes toward work; (5) small percentage of land ownership; (6) extreme hazards and variations in weather and soil conditions; and (7) prevalence of insect pests and fungus growth. Recognizing the limitations these factors cause, the workshop participants turned their attention to planning ways and means of obtaining better nutrition for Puerto Ricans.

One of the first things the participants from various regions did was to list the daily diets of the four income levels into which they had divided the island. Then set up the actual meals, breakfast, dinner and supper for each income group with graphs showing the nutritive values. As was to be expected, the low income group, which lives chiefly on starchy vegetables and coffee, were deficient in everything except possibly calories; while even the top 5 percent who had a very high income level did not reach the standard in all respects. One of the groups at the Workshop then took the full day's diets for the lowest and the highest income levels, as they had previously worked them out, ground them, dried them and used them for feeding two groups of rats. Even though the time for the experiment was short, the results convinced the most dubious that Puerto Rican diets needed to be improved. All the participants came to the conclusion that much could be done if they banded together and worked, each stimulating the people in his or her area to help.

#### Reaching the People

With Puerto Rico one of the most densely populated areas of the world (1,500 people per acre of arable land) obviously it would be impossible to have highly-trained food-missionaries go into each kitchen on the island to tell the homemaker the "why" of new foods and the "how" of preparing them. Nor could one home demonstration agent, alone, reach all the people as quickly as they needed to be reached.

When all groups do not take daily papers or listen to the radio or read magazines, the problem of communication becomes an important one. Psychology is also involved. One woman alone cooking over her charcoal fire is not apt to change her family's dinner from a liked food to an unknown food, unless she knows something very worth while about it, knows how it will taste and how to prepare it.

The answer was for the participants of the workshop, returning to their communities, to gather into groups all the people who could help. Participant after participant went back to his or her barrio, called meetings and organized nutrition committees. First they explained the problem; then, through panel discussions and informal conversation, decided what they could do about it in the light of the practical solutions they had reached at the workshop.

### Shortening the Line of Communication

Organizing as a nutrition committee meant that each member understood the need for a coordinated approach to the problem. Thus, each one working in his own field, could tell the story and by repetition strengthen it and stimulate action. The home demonstration agent could reach a number of people at once by a group demonstration. She could tell her listeners that eating soybeans instead of the more familiar beans would give greater strength and endurance for the long hours in the cane fields. She could show the women how to prepare the new beans for taste appeal and "stomach comfort." She could let them taste the dishes made from soybeans so they would know that spending the scant family funds for soybeans would be worth while. The Farm Security workers could distribute soybean seed and teach the farmers whom they help how to plant and harvest, while telling about their high nutritive value.

At school the teachers could tell the children that eating soybeans would make them grow taller and stronger. This would help condition them to eating a new food at home - some Puerto Ricans prefer going hungry to eating a food they do not like. The school lunch supervisor could serve soybean dishes at school, thereby teaching the children to like their good flavor while providing them with better nutrition.

Following this general pattern, nutrition committee members have given demonstrations on the use of dehydrated eggs in omelets scrambled with "sofrito,"<sup>1/</sup> in punches, eggnog, and custards. Demonstrations showed how to combine soybeans with the rice they like so well. They learned how good soybeans are when toasted, as croquettes, as salads and even made into soybean milk. Definite campaigns have been carried on to teach the people to eat greens and green and yellow vegetables. They have explained that fruits combined are not poison. But perhaps the most persistent food taboo they have been clearing up is the one against their native fruits. Some of the native fruits are very high in badly needed vitamin values. Guavas have a high vitamin C content, but the people scorned the guavas and cut the trees down. When they could afford it they bought canned fruit juices with food value so low that they had little to commend them except flavor appeal. Now under the influence of the various nutrition committee members the report comes that farmers are planting guava trees.

The Extension groups and Farm Security workers had previously worked out plans for year-round gardens which would provide good nutrition. The nutrition committee members are now building campaigns around these garden plans.

---

<sup>1/</sup> A basic sauce made from green tomatoes, minced onion, peppers, tomato sauce, fat pork, lard and other seasonings which is used to season beans and other prepared dishes.

and publicizing them in every way. This coordinated effort and wide publicity may begin to break down the Puerto Rican idea that working with one's hands lowers one's social position.

Convinced that "seeing is believing," nutrition committees have repeated the Workshop rat-feeding demonstrations in their own communities and other groups are planning to repeat it. This is perhaps the most valuable teaching device that could be used with a group of people whose food habits have been based upon a set group of traditional foods for so long a time. To tell a person that eating turnip greens, or any other food, will do certain things for him is to make a statement in the hope that it will be believed. If he sees that food fed to an animal and sees that animal not only live, but look better than an animal fed on the food which the person is accustomed to eating, he will be convinced.

And so they worked. School principals, grade teachers, home economics teachers, extension workers, farm and home supervisors, WPA workers, WFA workers and interested lay persons, all joining in a coordinated approach to put new foods into Puerto Rican pots. This changing of diet preferences will not be accomplished over night. It will take time to change long established food habits. But slowly, with all agencies concerned with nutrition working together, something is being done. The start has been made and the results of the Nutritive Workshop are beginning to show to a remarkable extent.

---

#### Bibliography

1. Comerio - A Study of a Puerto Rican Town, by Charles C. Rogler, Univ. of Kansas, Lawrence, Kansas; 1940.
2. Annual Report for the Fiscal Year 1941-42; Univ. of Puerto Rico Agricultural Exp. Sta., Rio Piedras, Puerto Rico.
3. Nutrition in Puerto Rico, by Lydia J. Roberts; Journal of American Dietetic Assn., May 1944.
4. The Puerto Rico Workshop, by Lydia J. Roberts; mimeographed by Off. of Distribution, War Food Admin., Wash., D.C.; July 1943.
5. Puerto Rico and Its People, by Trumbull White; Frederick A. Stokes Company, N.Y., N.Y.; 1938.
6. Puerto Rico and the Virgin Islands, by Daisy Reck; Farrar & Rinehart, Inc., N.Y., N.Y.; 1939.

and publicizing them in every way. This coordinated effort and wide publicity may begin to break down the Puerto Rican idea that working with one's hands lowers one's social position.

Convinced that "seeing is believing," nutrition committees have organized the following eye-seeing demonstrations in their own communities and other groups are planning to repeat it. While in perhaps the most valuable teaching device that could be used with a group of people whose food habits have been based upon a set group of traditional foods for so long a time. To tell a person that eating turning greens, or any other food, will do certain things for him is to make a statement in the hope that it will be believed. If he sees that food is an actual necessity that cannot be lived without, but look better than an animal fed on the food which the person is accustomed to eating, he will be convinced.

And so they worked. School principals, grade teachers, home economics teachers, extension workers, farm and home supervisors, WPA workers, and interested lay persons, all joining in a coordinated approach to put the foods into Puerto Rican pots. This changing of diet preferences will not be accomplished over night. It will take time to change long established food habits, but slowly, with all resources concentrated with nutrition workers together, something is being done. The state has been able and the results of the nutritive workshop are beginning to show to a remarkable extent.

#### Bibliography

1. Congreso - A Study of a Puerto Rican Town, by Charles C. Rogers, Univ. of Kansas, Lawrence, Kansas, 1940.
2. Annual Report for the Fiscal Year 1941-42, Univ. of Puerto Rico Agricultural Exp. Sta., Rio Piedras, Puerto Rico.
3. Nutrition in Puerto Rico, by Lydia J. Roberts, Journal of Nutrition, 1941, 25: 1-10.
4. The Puerto Rico Workshop, by Lydia J. Roberts, mimeographed by U.S. Distribution, War Food Admin., Wash., D.C., July 1941.
5. Puerto Rico and Its People, by Franklin White, Frederick A. Stokes Company, N.Y., N.Y., 1936.
6. Puerto Rico and the Virgin Islands, by Daisy Beck, Henry & Blumenthal, Inc., N.Y., N.Y., 1939.